

SUPPLEMENTARY TABLE 2. State- and age-specific values* among adults aged ≥18 years used to estimate expected Million Hearts-preventable event totals and hospitalization costs during 2017–2021 if no further preventive intervention occurs.

State	Expected Population, in thousands †				2016 Treat-and-release ED Rate§				2016 Acute Hospitalization Rate†				2016 Mortality Rate				Overall Rate					Cost per Hospitalization (2016 \$US)**				
	Age group (yrs)				Age group (yrs)				Age group (yrs)				Age group (yrs)				Age group (yrs)					Age group (yrs)				
	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	ASR	18–44	45–64	65–74	≥75	
AL	8430.2	6341.5	2586.1	1660.5	<u>49.0</u>	<u>256.8</u>	<u>464.4</u>	<u>960.0</u>	<u>206.5</u>	<u>1320.3</u>	<u>2566.8</u>	<u>5297.3</u>	13.4	127.5	346.5	1559.0	<u>268.8</u>	<u>1704.7</u>	<u>3377.7</u>	<u>7816.3</u>	<u>1652.4</u>	<u>16921.4</u>	<u>16823.3</u>	<u>15659.1</u>	<u>12089.1</u>	
AK	1450.1	914.0	328.5	142.2	<u>16.7</u>	<u>106.6</u>	<u>232.9</u>	<u>584.2</u>	67.7	552.5	1288.5	3150.8	6.9	47.0	175.6	1023.4	<u>91.4</u>	<u>706.1</u>	<u>1697.0</u>	<u>4758.5</u>	<u>822.7</u>	23257.8	28251.6	26797.2	22245.7	
AZ	12619.6	8453.0	3670.0	2462.4	19.2	130.6	265.8	677.5	83.9	682.0	1444.7	3232.3	4.2	59.1	182.6	946.5	107.4	871.8	1893.2	4856.3	913.9	15488.5	16480.7	15542.1	11906.9	
AR	5180.0	3770.3	1527.9	1066.6	38.5	200.5	392.5	860.4	130.7	969.7	1936.3	4238.2	18.7	186.7	490.9	1778.9	187.8	1356.9	2819.7	6877.5	1366.7	11332.4	12045.8	10883.7	8358.2	
CA	76534.8	48532.3	17384.3	12181.3	20.4	141.1	308.0	851.7	80.2	677.7	1435.9	3682.8	4.9	61.5	208.8	1306.2	105.5	880.3	1952.7	5840.7	999.4	23549.3	22669.5	22262.2	17377.6	
CO	10915.5	7051.6	2641.2	1609.0	<u>15.2</u>	<u>93.2</u>	<u>204.7</u>	<u>610.3</u>	63.6	472.3	1121.7	3244.5	4.6	53.2	162.5	1115.0	<u>83.4</u>	<u>618.7</u>	<u>1488.9</u>	<u>4969.8</u>	<u>785.9</u>	21105.0	20090.6	18003.8	12953.1	
CT	6059.3	4881.5	1845.7	1407.0	5.3	44.4	113.3	353.1	75.8	599.3	1573.0	4844.2	4.7	41.5	151.2	1135.6	85.9	685.2	1837.5	6333.0	950.4	20353.3	20240.2	19366.2	14334.4	
DE	1647.7	1266.3	573.4	369.2	<u>28.2</u>	<u>137.4</u>	<u>264.1</u>	<u>670.3</u>	<u>119.4</u>	<u>705.3</u>	<u>1459.6</u>	<u>3697.6</u>	7.8	68.1	197.1	1088.2	<u>155.3</u>	<u>910.8</u>	<u>1920.7</u>	<u>5456.1</u>	<u>1000.5</u>	<u>16921.4</u>	<u>16823.3</u>	<u>15659.1</u>	<u>12089.1</u>	
DC	1749.7	803.1	243.3	172.2	23.4	260.2	419.2	778.7	171.2	2178.0	3803.9	6057.6	5.1	126.7	294.1	1291.8	199.7	2565.0	4517.2	8128.1	2048.2	22468.7	17512.3	18921.6	15948.5	
FL	35844.3	28270.9	12155.3	9111.9	24.0	130.0	213.3	466.9	129.6	956.6	1865.9	4407.0	6.9	73.5	197.5	1102.3	160.5	1160.1	2276.8	5976.2	1163.7	13539.9	14385.2	13527.9	10551.6	
GA	19416.1	12975.4	4884.5	2903.6	43.6	243.9	485.6	1047.1	133.1	962.1	1970.8	4399.3	10.4	109.6	326.3	1462.2	187.1	1315.6	2782.7	6908.5	1351.0	13764.9	14215.1	13540.8	10456.4	
HI	2581.3	1860.1	809.3	581.7	37.6	191.1	271.9	507.9	132.3	841.8	1471.1	3330.1	7.8	68.1	163.3	1058.6	177.7	1101.0	1906.3	4896.5	1031.8	18901.2	19752.4	20285.5	16732.4	
ID	2941.1	1939.9	908.0	592.7	<u>21.2</u>	<u>157.5</u>	<u>316.8</u>	<u>812.8</u>	<u>89.7</u>	<u>809.1</u>	<u>1749.1</u>	<u>4487.0</u>	5.8	78.2	236.1	1320.5	<u>116.8</u>	<u>1044.8</u>	<u>2301.9</u>	<u>6620.3</u>	<u>1156.0</u>	<u>16921.4</u>	<u>16823.3</u>	<u>15659.1</u>	<u>12089.1</u>	
IL	23206.5	16072.7	5970.0	4237.1	20.2	126.2	281.2	764.1	99.2	766.7	1837.0	4774.2	6.4	83.4	263.7	1472.5	125.8	976.3	2381.9	7010.8	1174.7	18108.2	17341.6	16148.8	11877.9	
IN	11679.5	8413.1	3271.7	2254.2	31.9	189.7	415.0	1025.3	117.3	911.7	2083.5	4982.1	8.0	98.4	282.5	1430.0	157.2	1199.8	2781.0	7437.4	1338.2	15203.2	16051.9	14184.5	10579.9	
IA	5415.3	3954.6	1602.5	1219.7	19.6	167.3	398.2	1199.1	73.3	596.0	1379.5	3801.5	4.3	58.8	197.5	1228.7	97.2	822.1	1975.1	6229.4	1007.9	17769.2	16105.1	13902.2	10709.3	
KS	5175.7	3525.4	1405.7	1006.9	20.2	155.4	362.5	1102.6	91.8	696.6	1519.2	4141.2	4.2	74.7	227.8	1504.7	116.2	926.8	2109.4	6748.5	1106.9	13606.0	14505.3	13865.3	10670.1	
KY	7697.2	5856.8	2321.2	1504.3	40.8	283.0	580.5	1304.2	135.7	1028.9	2252.2	4981.5	13.4	147.4	391.6	1471.9	189.8	1459.3	3224.3	7757.6	1510.3	18040.0	17471.3	15517.6	11792.8	
LA	8586.5	6032.6	2144	1338.5	<u>39.7</u>	<u>236.4</u>	<u>432.9</u>	<u>903.4</u>	164.7	1199.4	2344.3	4855.5	13.5	133.2	372.0	1595.0	<u>217.8</u>	<u>1569.1</u>	<u>3149.2</u>	<u>7353.9</u>	<u>1523.2</u>	12724.0	13141.8	12499.4	9905.6	
ME	2015.1	1942.1	865.3	577.5	17.5	168.8	506.1	1564.3	74.4	675.0	1685.1	4526.7	6.0	56.9	202.2	1196.9	97.8	900.7	2393.5	7287.9	1157.9	25000.2	20866.0	19083.2	12905.0	
MD	11088.8	8075.7	2811.1	1963.2	23.1	170.8	337.7	809.0	87.0	706.4	1710.8	4318.7	7.2	77.9	243.4	1272.7	117.3	955.1	2291.9	6400.4	1106.6	14242.0	13912.7	13287.8	10506.3	
MA	12597.2	9361.0	3283.4	2412.3	6.6	55.6	143.0	368.9	68.5	628.6	1765.8	5363.7	2.9	43.9	167.2	1225.5	78.1	728.1	2076.0	6958.1	1033.1	23736.3	20835.0	17632.1	12383.8	
MI	16659.3	13191.2	5247.1	3683.8	<u>29.2</u>	<u>180.0</u>	<u>386.7</u>	<u>972.2</u>	123.4	929.5	2165.3	5441.0	7.7	85.0	261.7	1502.5	<u>160.3</u>	<u>1194.4</u>	<u>2813.7</u>	<u>7915.7</u>	<u>1378.7</u>	15842.6	15157.8	14072.3	10377.7	
MN	9836.8	7139.5	2688.6	1961.1	9.7	86.0	254.5	876.4	66.3	551.2	1347.2	3939.7	3.4	39.5	140.8	1071.7	79.4	676.6	1742.5	5887.8	900.2	22764.3	21386.9	19295.0	13464.4	
MS	5188.3	3771.9	1473.7	939.2	<u>43.4</u>	<u>244.1</u>	<u>419.5</u>	<u>870.8</u>	176.4	1174.7	2152.6	4396.7	18.5	200.8	478.9	1823.8	<u>238.2</u>	<u>1619.6</u>	<u>3050.9</u>	<u>7091.2</u>	<u>1520.7</u>	11599.8	12760.8	12446.6	10266.1	
MO	10560.3	7787.6	3174.5	2238.9	25.7	177.3	368.6	907.6	130.0	1008.9	2140.1	4910.2	9.8	109.1	340.9	1616.6	165.6	1295.3	2849.6	7434.3	1381.5	15140.3	15641.3	14875.0	11305.6	
MT	1748.2	1363.5	647.0	413.8	15.1	111.1	372.3	1082.6	50.3	469.5	1133.2	3219.7	4.3	51.4	172.5	1273.5	69.7	632.0	1678.1	5575.8	849.4	13388.4	18237.8	16919.5	11839.2	
NE	3420.3	2335.9	903.6	675.8	15.7	113.8	268.2	897.9	65.4	580.2	1435.2	3528.8	3.3	63.7	234.4	1217.9	84.3	757.8	1937.8	5644.6	929.6	18851.6	19132.3	18010.8	12841.6	
NV	5661.4	3742.5	1382.7	841.5	32.7	192.4	301.2	744.2	119.4	845.8	1684.7	3753.7	8.3	79.7	217.3	1038.4	160.5	1117.8	2203.2	5536.3	1107.4	13274.8	15363.8	16088.4	12553.3	
NH	2167.0	1971.6	751.4	495.7	<u>20.0</u>	<u>98.0</u>	<u>234.4</u>	<u>709.9</u>	<u>83.8</u>	<u>503.6</u>	<u>1293.6</u>	<u>3918.3</u>	5.5	48.6	174.7	1153.2	<u>109.2</u>	<u>650.2</u>	<u>1702.7</u>	<u>5781.5</u>	<u>893.3</u>	<u>16921.4</u>	<u>16823.3</u>	<u>15659.1</u>	<u>12089.1</u>	
NJ	15794.1	12125.5	4184.0	3156.8	20.6	128.9	246.5	661.1	84.0	683.1	1755.2	5048.4	4.4	54.7	198.0	1254.0	109.0	866.8	2199.7	6963.5	1108.0	17606.9	17628.1	16790.2	13795.9	
NM	3532.2	2555.6	1183.0	748.6	<u>15.6</u>	<u>101.5</u>	<u>211.0</u>	<u>543.4</u>	64.5	505.9	1142.2	2735.6	5.8	66.1	183.0	1142.8	<u>85.9</u>	<u>673.6</u>	<u>1536.2</u>	<u>4421.8</u>	<u>767.3</u>	16740.4	17079.9	15030.5	11718.5	
NY	36743	25673.7	9306.2	7090.6	12.3	91.4	182.7	462.1	82.4	736.4	1693.0	4445.6	4.9	59.4	198.2	1181.5	99.7	887.3	2073.9	6089.2	1029.8	20443.6	19114.7	18597.9	14855.5	
NC	18179.8	13133.9	5509.2	3556.6	27.5	197.2	409.1	965.0	123.7	951.5	2056.1	4642.4	7.2	81.2	261.8	1312.0	158.4	1229.9	2727.1	6919.4	1303.2	15003.3	14798.8	13772.3	10058.6	
ND	1520.8	1023.6	348.5	265.9	16.1	137.9	385.1	903.7	86.2	830.7	2087.5	4918.4	7.9	51.5	209.4	1185.3	110.3	1020.1	2682.0	7007.4	1210.0	23026.2				

Vital Signs: State-Level Variation in Nonfatal and Fatal Cardiovascular Events Targeted for Prevention by Million Hearts 2022

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State	Expected Population, in thousands [†]				2016 Treat-and-release ED Rate [§]				2016 Acute Hospitalization Rate [¶]				2016 Mortality Rate				Overall Rate					Cost per Hospitalization (2016 \$US)**				
	Age group (yrs)				Age group (yrs)				Age group (yrs)				Age group (yrs)				Age group (yrs)					Age group (yrs)				
	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	18–44	45–64	65–74	≥75	ASR	18–44	45–64	65–74	≥75	
RI	1866.2	1420.2	526.7	403.4	14.7	131.4	310.5	849.0	90.7	732.8	1995.2	5687.3	4.2	56.5	197.0	1154.1	109.6	920.8	2502.8	7690.4	1212.6	17708.7	16526.2	14607.2	11686.1	
SC	8648.7	6508.2	2944.5	1777.3	42.8	258.9	458.0	1047.5	139.3	1006.2	1880.6	4186.2	10.6	111.6	293.4	1240.6	192.7	1376.6	2632.1	6474.3	1326.7	14359.8	14669.9	13290.9	10268.5	
SD	1501.0	1093.9	448.4	328.0	14.9	127.6	338.2	1067.8	70.7	613.1	1518.1	4145.7	7.8	104.2	300.8	1354.7	93.4	844.9	2157.1	6568.2	1057.7	17478.3	17013.5	15707.9	12246.6	
TN	11766.3	8709.5	3558.5	2292.6	44.0	271.7	480.9	967.2	159.5	1161.1	2460.3	5223.5	12.1	125.4	348.0	1420.1	215.6	1558.3	3289.3	7610.8	1551.6	13130.3	13428.8	12351.2	9093.3	
TX	54909.6	33964.7	11799.6	7268.5	32.1	207.6	430.4	938.7	112.8	886.7	1997.1	4381.0	7.4	92.2	294.8	1340.3	152.3	1186.4	2722.3	6660.0	1264.3	15724.1	16410.8	15507.4	11968.6	
UT	6136.6	3040.5	1132.7	738.9	14.4	96.3	258.4	661.7	62.2	497.3	1223.3	2804.7	3.2	48.9	200.8	1442.7	79.8	642.6	1682.5	4909.1	805.7	21956.9	19952.5	18452.4	12504.2	
VT	1020.5	897.8	366.9	241.5	11.4	98.8	365.0	1065.1	41.0	426.4	1146.6	3760.8	1.0	36.6	131.5	1084.9	53.3	561.7	1643.1	5910.8	840.6	20866.9	19836.5	18022.8	12545.1	
VA	15735.5	11172.6	4055.2	2705.2	23.3	154.1	335.0	839.5	97.6	790.5	1861.9	4709.2	7.2	78.3	240.6	1285.7	128.0	1023.0	2437.5	6834.4	1183.2	17100.7	16132.3	14336.2	10199.8	
WA	13621.0	9332.4	3799.9	2416.3	17.1	119.1	270.1	731.6	72.9	620.8	1514.5	4071.3	3.9	50.6	179.9	1153.9	94.0	790.5	1964.5	5956.8	972.9	23711.3	21531.1	19239.7	13353.3	
WV	2915.8	2498.0	1174.1	753.9	30.7	207.8	400.4	881.2	128.8	1069.8	2235.2	4935.6	9.1	101.6	276.8	1359.5	168.5	1379.2	2912.4	7176.3	1397.4	14255.0	16323.2	14976.5	11300.6	
WI	9883.7	7646.9	2992.9	2145.2	14.0	102.4	303.2	951.9	76.7	614.2	1516.4	4299.5	4.3	63.0	202.4	1339.3	95.0	779.7	2022.0	6590.6	1025.0	18492.8	18512.7	17127.8	11938.3	
WY	1052.6	748.0	311.1	182.6	20.1	152.3	375.7	1232.2	44.6	387.2	1012.4	2961.9	6.2	77.2	263.0	1212.0	71.0	616.7	1651.0	5406.1	828.9	16241.7	19306.2	17842.1	12587.7	

Sources: Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project State Emergency Department Databases (from all states except Alabama, Alaska, Colorado, Delaware, Idaho, Louisiana, Michigan, Mississippi, New Hampshire, New Mexico, Oklahoma, Oregon, Pennsylvania, Virginia, Washington, and West Virginia; ED data for Mississippi and Oregon are regularly collected, but 2016 data were not available at time of this report) and State Inpatient Databases (from all states except Alabama, Delaware, Idaho, and New Hampshire); National Center for Health Statistics' National Vital Statistics System Mortality Data (all states are represented).

Abbreviations: ED, emergency department; ASR, age-standardized rate.

*Values that are **bolded and underlined** were imputed because the state did not have 2016 ED data and, where applicable, hospitalization data. For these states it was assumed that the proportional relationship across their ED, hospitalization and mortality rates was the same as the average calculated among states with complete data. If a state was missing 2016 hospitalization data, the national age-specific average cost per hospitalization event was used.

[†] State-level population projections were based on the linear extrapolation of 2016 July 1st Census estimates and 2020 population projections provided by the University of Virginia's Weldon Cooper Center for Public Service (<https://demographics.coopercenter.org/national-population-projections>).

[§] Excludes ED visits where the patient died in the ED, was transferred to another hospital, or was admitted to the same hospital.

[¶] Excludes hospitalizations that were reported as elective or where the patient died in the hospital or was transferred to another hospital.

** Described by applying Healthcare Cost and Utilization Project cost-to-charge ratios (www.hcup-us.ahrq.gov/db/state/costtocharge.jsp) to the charges the hospitals billed for the entire hospital stay in each state; these costs exclude professional (physician) fees.